

SUB
E17

D1

wherein each strip section comprises at least two thread elements disposed longitudinally and in parallel to each other and at least partly coated with at least one layer of raw elastomer material, and

wherein each of the strip sections extends in a substantially U-shaped configuration around a cross-section outline of the carcass structure to define two side portions spaced apart from each other in an axial direction and a crown portion extending at a radially-outer position between the side portions; and

a pair of annular reinforcing structures each engaged at areas close to a respective inner circumferential edge of the at least one carcass ply and comprising:

an annular anchoring insert, substantially in a form of an annulus, disposed coaxially with the carcass structure and adjacent to the respective inner circumferential edge of the at least one carcass ply, the annular anchoring insert comprising at least one elongated element extending in radially-concentric coils and defining a radially-extending coil layer comprising an axial thickness approximately equal to a thickness of the at least one elongated element; and

at least one filling body joined to the annular anchoring insert at a radially-outer position of the annular anchoring insert and extending radially outward from the annular anchoring insert, the at least one filling body comprising, over at least a portion of the at least one filling body, an axial thickness approximately equal to the axial thickness of the radially-extending coil layer.

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D2 SUB
E27

59. (twice amended) A tyre comprising a carcass structure made by a method comprising:

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Sub
E2

D2

preparing strip sections, each comprising longitudinal and parallel thread elements at least partly coated with at least one layer of raw elastomer material;

making at least one carcass ply by laying down and circumferentially distributing the strip sections on a toroidal support, each of the strip sections extending in a U-shaped configuration around a cross-section outline of the toroidal support to define two side portions, mutually spaced apart in an axial direction, and a crown portion, extending at a radially-outer position between the side portions; and

applying annular reinforcing structures to areas close to inner circumferential edges of the at least one carcass ply;

wherein formation of each annular reinforcing structure comprises:

laying down at least one elongated element in radially-concentric coils to form an annular anchoring insert substantially in a form of an annulus and defining a radially-extending coil layer comprising an axial thickness approximately equal to a thickness of the at least one elongated element;

forming at least one filling body of raw elastomer material comprising, over at least a portion of the at least one filling body, an axial thickness approximately equal to the axial thickness of the radially-extending coil layer; and

joining the at least one filling body to the annular anchoring insert at a radially-outer position of the annular anchoring insert so that the at least one filling body extends radially outward from the annular anchoring insert.

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Sub
E27

D2

60. (twice amended) A tyre, comprising:
a carcass structure, comprising:
at least one carcass ply comprising strip sections circumferentially distributed around a
geometric rotation axis of the tyre,
wherein each strip section comprises at least two thread elements disposed longitudinally
and in parallel to each other and at least partly coated with at least one layer of raw elastomer
material, and
wherein each of the strip sections extends in a substantially U-shaped configuration
around a cross-section outline of the carcass structure to define two side portions spaced apart
from each other in an axial direction and a crown portion extending at a radially-outer position
between the side portions; and
a pair of annular reinforcing structures each engaged at areas close to a respective inner
circumferential edge of the at least one carcass ply and comprising:
an annular anchoring insert, substantially in a form of an annulus, disposed coaxially with
the carcass structure and adjacent to the respective inner circumferential edge of the at least one
carcass ply, the annular anchoring insert comprising at least one elongated element extending in
radially-concentric coils and defining a radially-extending coil layer comprising an axial
thickness approximately equal to a thickness of the at least one elongated element; and
at least one filling body joined to the annular anchoring insert at a radially-outer position
of the annular anchoring insert and extending radially outward from the annular anchoring insert,
the at least one filling body comprising, over at least a portion of the at least one filling body, an
axial thickness approximately equal to the axial thickness of the radially-extending coil layer.

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